

ABSTRACT

Compositions, kits and methods are provided for promoting general health or for
5 prevention or treatment of diseases by using novel recombinant fusion proteins of human
serum albumin (HSA) and bioactive molecules. The bioactive molecules may be a
protein or peptide having a biological function in vitro or in vivo, and preferably, having
a therapeutic activity when administered to a human. By fusing the bioactive molecule to
HSA, stability of the bioactive molecule in vivo can be improved and the therapeutic
10 index increased due to reduced toxicity and longer-lasting therapeutic effects in vivo. In
addition, manufacturing processes are provided for efficient, cost-effective production of
these recombinant proteins in yeast.